

# Management of Unhealing Ulcers on Bilateral Borders of the Tongue

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**Abstract** Presence of long standing unhealing ulcer in an oral cavity, not only makes eating and chewing difficult but puts the patient under tremendous mental stress leading to cancer phobia. This case report describes management of unusual occurrence of bilateral unhealing ulcers on the tongue of a young lady. The ulcers developed after insertion of fixed partial dentures four year ago. Despite visiting many physicians, dentists and an ENT specialist, she didn't find the relief. Due to long illness, she has become very irritable, anxious and uncooperative. It was therefore, necessary to treat her in a logical order that her confidence in us is not lost. First of all, to reduce her anxiety, she was put on 0.25 mg Alprazolam tablets which also helped her in sleeping at night. Repair or replacement of her previously deteriorated intracoronal restorations was performed next. Finding no relief with this, a bridge present on right side was removed first. It reduced redness in the ulcer on right side of tongue. The other bridges present on left side were also removed. The ulcers had become less painful and stopped progressing but not found healing. Biopsy of the lesion was done which reported as "Pseudoepitheliomatous Hyperplasia". An oral surgeon was requested to excise the lesion. After excision, both the ulcers healed within two weeks.

**Keywords:** oral Metal allergy, oral Pseudoepitheliomatous hyperplasia, nickel alloy allergy

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## 1. Introduction

A 32-year old lady was referred to us with complaint of inability to eat normal diet due to burning mouth. The cause of mouth burning was non-healing ulcers present on lateral border of her tongue for last four years. There was nothing significant in her medical history. Family history revealed that she was unmarried living with her brother as parents had expired. She was under intense mental stress due to traditional cold-war with brother's wife and for not having her own source of income. Owing to anxiety and mental stress, she used to clench (Bruxism) her teeth during sleep and while working. She was in the habit of sucking borders of her tongue to get relief from burning.

History of present illness showed that she had two ulcers, one on each side of her tongue. The lesions started as a small abrasion after having her teeth restored with several intracoronal and extracoronal restorations four years ago. The attending dentist prescribed her some gel for local application when the abrasion was brought to his notice. The lesion remained unhealed and enlarged in size with more redness in its base and pain. She then visited many general practicing dentists but did not get relief. Her family physician referred her to an ENT specialist who took a biopsy of the lesions. The histopathologist reported

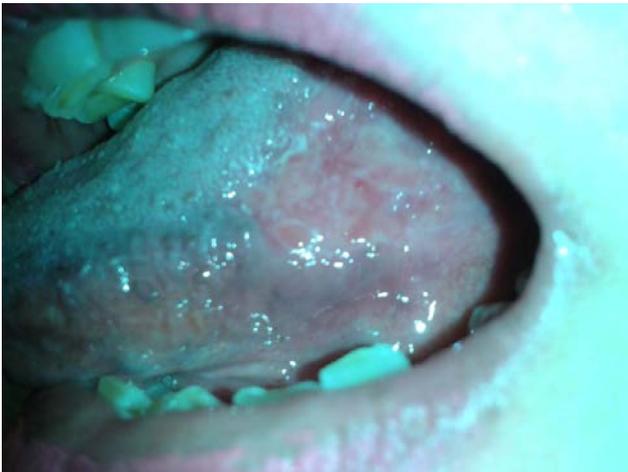
that they were hyperplastic chronically inflamed ulcers with presence of fungus thread. The doctor prescribed some antifungal medicines but of no avail.



Figure 1. Unhealed ulcer on right lateral border of tongue

On intraoral examination, an ulcer measuring 10x8 mm with red base and white margins was found on the right lateral border of her tongue (Figure 1). A similar lesion was present on the left lower border with much smaller dimension (Figure 2). Caries history was very significant leading to many restored teeth with amalgam and composite. Some of the restorations appeared deteriorated

requiring repair or replacement. She also had dental bridges, one on each side of mandible and one on right side of maxilla. The abutments of the bridge were fabricated with porcelain fused to metal (PFM) and the pontics with porcelain.



**Figure 2.** Unhealed lesion on left lower border of tongue

## 2. Treatment

As patient was very anxious and complaining of insomnia due to cancer-phobia, psychotherapy was done for her reassurance and Tablet Alprazolam 0.25 mg was prescribed to be taken before going to bed.

Many restorations were showing leaky margins or were partially damaged and deteriorated. Keeping in mind the psychological status of the patient, it was anticipated that rubbing of tongue against the damaged restorations may be the persistent source of frictional trauma to the tongue, not allowing the ulcers to heal [1]. All such restorations were either repaired or replaced. To see the effect of correcting the restorations patient was recalled after 3 weeks. The patient did not find any relief. On visual inspection, the lesion did not show any shrinkage or sign of healing. One more clinical inspection was done after two weeks but dimensions of the lesion were unchanged since first inspection.

Thinking that the bridges may be the cause of these ulcers as some patients show allergy to metals used in dental appliances or restorations [2], it was decided to remove them. The core of the bridges was fabricated using some base metal alloy, which normally contains Nickel as one of its major constituent. The bridges were functional to the extent that she was not ready to sacrifice them. With great difficulty, she was convinced to have her one of the bridges removed. As the lesion on the right side was bigger and more painful, the bridge was removed from the same side first. On next appointment after 3 weeks, the lesion looked better with reduced redness and pain. But during this period, the lesion on the left border of the tongue became active and annoying for the patient. It was therefore decided to remove all bridges from her mouth.

Though after 6 weeks of removal of the bridges, the lesion stopped progressing and became less painful but remained unhealed. It was therefore decided to have a biopsy from both ulcers. The biopsy report showed Pseudoepitheliomatous Hyperplasia with chronic

inflammation. Like other inflammatory hyperplasia, excision was the only option left to treat it. The patient was referred to an oral surgeon with the request for local excision of the lesion along with removal of chronic inflammatory infiltrate. The surgeon performed the procedure under general anesthesia and the lesions took two weeks to heal (Figure 3 & Figure 4). After 2 more weeks when patient was much comfortable, new all zirconia bridges (3M ESPE US) were inserted in place.

For last one year patient is happily using these bridges without any complaint of difficulty in eating or chewing spicy food.



**Figure 3.** healed lesion on right lateral border of tongue



**Figure 4.** Healed lesion on left side of tongue

## 3. Discussion

Pseudoepitheliomatous Hyperplasia (PEH) is a benign lesion. It is also known as pseudocarcinomatous hyperplasia and occurs as a histopathological reaction against persistent trauma [2].

Allergies from dental metals may also be a source of sore tongue. Its prevalence in the last decade has gradually increased [3] and must be excluded before labeling the lesion as malignant. Allergies from base metal alloys containing Nickel are well reported.

The epithelium in PEH is characterized by a hyperplastic change that mimics morphologically the invasion patterns of Squamous Cell Carcinoma. It is

therefore, many times misdiagnosed as a malignant lesion [4].

A clinician must give due time on the diagnosis in consultation with the histopathologist. A mistake done by any of them may either lead to unnecessary surgical intervention or chemotherapy or leaves the cause of the lesion and the lesion itself untreated. This may bring malignant transformation in the lesion [5,6].

Most probably in this case, cause of the ulcer was allergy from the metal used in the fabrication of bridges. Once the source of chronic inflammation was removed and the local excision was performed the long standing ulcers healed promptly.

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